

REMARKS

The application is amended and believed to be in condition for allowance.

Independent claim 1 and dependent claim 5 remain in the application. Dependent claims 7-8 are new and are believed to find support in the specification as originally filed (e.g., paragraph [0015] of the published application), and are therefore believed to not introduce new matter.

Double Patenting

Claim 1 was rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 21 of U.S. Patent No. 7,072,173 (US '173) in view of JP 2000-173876 (JP '876) and JP 01-268110 (JP '110).

Claim 5 was rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 21 of US '173 in view of JP '876, JP '110 and Arora et al. (RE 31,743; ARORA).

The rejections are respectfully traversed.

The Official Action offers US '173 as teaching an electrolytic capacitor electrolyte as recited in claim 1, but concedes that US '173 fails to teach any of an electrolytic capacitor comprising anode and cathode foils, an outer case housing the capacitor element, and a separator formed from a heat resistant synthetic resin, wherein the separator is free of polypropylene and polyethylene.

The Official Action offers JP '110 as teaching these elements, particularly a separator formed of viscose rayon (referring to a machine-translation of the Abstract of this reference). In other words, the Official Action alleges that viscose rayon is a heat resistant synthetic resin, and contends that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the separator of '173 using viscose rayon since such a modification would form an aluminum electrolytic capacitor having a separator with high heat resistance.

Applicants respectfully disagree. It is respectfully submitted that the separator 5 of JP '110, disclosed as "composed of a woven or non-woven fabric made of the (sic) long fiber consisting of viscose rayon" fails to teach or suggest a "separator... made of a heat resistant synthetic resin" as recited by claim 1. In particular, it is respectfully submitted that long fiber consisting of viscose rayon is not a heat resistant synthetic resin.

Rayon, as suggested by JP '110 and as described in various other references, is a manufactured regenerated cellulose material (see, e.g., [http://en.wikipedia.org/wiki/Viscose\\_rayon](http://en.wikipedia.org/wiki/Viscose_rayon), last accessed February 14, 2011). Although rayon is man-made, those skilled in the art do not consider rayon as synthetic because it is made from wood pulp, a natural and renewable resource. The term "viscose rayon" as used in the textile

industry refers to a silk-like aesthetic of the material, wherein the cellulosic base contributes many properties similar to those of cotton or other natural cellulosic fibers. Among rayon's useful properties, it is moisture absorbent (more so than cotton), breathable, and easily dyed, (see, e.g., <http://www.swicofil.com/viscose.html>, last accessed February 14, 2011).

In stark contrast, the separator of the claimed invention is a synthetic resin. Synthetic resins are viscous liquids that are capable of hardening permanently, similar to natural resins except they differ chemically from their natural cousins.

According to the specification on file, the separator may include rayon fabric. A separator of the present invention is made of heat-resistant synthetic resin. "Examples of the separator include fabric, nonwoven fabric, paper, and porous film," (page 4, line 21). "[T]he fabric, nonwoven fabric or paper is made by using the high-molecular fibers such as... rayon," and/or other materials, (page 4 line 22 to page 5 line 4).

The resin component of the separator, however, is distinct and different. "A separator of the present invention is made of heat-resistant synthetic resin," (page 4, line 20). "Examples of resins used as binders include epoxy resin, phenol

resin, polyurethane resin, and melamine resin," (page 5, lines 4-5).

None of the references applied by the Official Action, individually or in combination, teaches or suggests the resin component of the separator as recited by claim 1. Therefore, it is respectfully submitted that the combination of US '173 with JP '876 and JP '110 as proposed by the Official Action fails to teach all the features recited by claim 1.

Further, "[b]ecause the separator is made of heat resistant synthetic resin, moisture from the separator is less likely to be mixed into the electrolyte solution, so that the electrolytic capacitor has excellent high temperature life characteristic," (page 8, lines 1-3). As a result, "moisture generation is controlled to obtain an excellent high temperature life characteristic... [and] the moisture resistance characteristic is excellent," (page 8, lines 7-9). Accordingly, an electrolytic capacitor of the present invention has low impedance characteristic and the high withstand voltage wherein the electrolytic capacitor provides excellent moisture resistance (page 8, lines 10-13).

In contrast, there is no teaching or suggestion in any of the applied references (whether taken individually or in combination) toward moisture control and the separator, as taught by the present application. Accordingly, it is respectfully submitted that none of the applied references, individually or in

combination, could have led one of skill to arrive at the invention herein claimed in claim 1.

It is therefore respectfully submitted that the invention as claimed in claim 1 is patentable over US '173 in view of JP '876, and JP '110. It is also respectfully submitted that claim 5 is patentable at least for depending from a patentable parent claim.

Accordingly, withdrawal of the rejections under Section 103 is respectfully requested.

It is further respectfully submitted that new dependent claims 7-8 are patentable in its own right, as claim 7 expressly excludes rayon as a component of the separator, and the applied references are not believed to teach the resin as recited in claim 8.

In conclusion, it is respectfully submitted that the Applicants have been fully responsive to the October 27, 2010 Official Action, and that the claims as presented herein are in allowable condition. In view of this, reconsideration and allowance of the claims are earnestly requested. Timely issuance of a Notice of Allowance is respectfully solicited.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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